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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,823

07/05/2006

Giuseppe Di Bono

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01/28/2011

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EXAMINER

DELCOTTO, GREGORY R

ART UNIT

PAPER NUMBER

1761

MAIL DATE

DELIVERY MODE

01/28/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/575,823	DI BONO, GIUSEPPE	
	Examiner	Art Unit	
	Gregory R. Del Cotto	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed 10/14/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/11/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 5-8, 11, and 12 are pending. Claims 2-4, 9, and 10 have been canceled. Applicant's arguments and amendments filed 10/21/10 have been entered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/10 has been entered.

Objections/Rejections Withdrawn

The following objections/rejections set forth in the Office action mailed 4/15/10 have been withdrawn:

The rejection of claims 1, 3, 6, and 9 under 35 U.S.C. 102(b) as being anticipated by GB 1,242,247 has been withdrawn.

The rejection of claims 5, 7, 11, and 12 under 35 U.S.C. 103(a) as being unpatentable over GB 1,242,247 as applied to claims 1, 3, 6, and 9 above, and further in view of Domburg et al (US 5,747,441), has been withdrawn.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domburg et al (US 5,747,441) in view of Kamel et al (US 5,230,822).

Domburg et al teach an encapsulated bleach particle comprising 1 to 30% by weight of a coating including a gelled polymer; from 70 to 99% by weight of a core material selected from the group consisting of a peroxygen bleach compound, a bleach catalyst, and a bleach precursor. See Abstract. The polymer used as a coating may be whey proteins, egg protein gels, etc. The encapsulated particles of the invention have a mean particle size of 500 to 1500 microns when used in detergent powders and in liquid formulations, have a particle size in between 10 and 200 microns. See column 2, lines 50-69. Suitable peroxygen bleaches include alkali metal perborates, percarbonates, etc. Suitable peracid precursors include tetraacetylene diamine (TAED), etc. Peracid precursors, which may be encapsulated, may be incorporated into products along with a source of hydrogen peroxide, which also could optionally be encapsulated. See column 3, line 28 to column 4, line 55. The bleaching detergent composition may also contain enzymes such as proteases, cellulases, etc. See column 7, lines 1-30.

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However, Domburg et al do not teach the use of a coating agent for the enzyme or a liquid detergent composition containing a coated bleaching agent, a coated enzyme in which the coating is sensitive to a change in temperature, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Kamel et al teach solid core particles encapsulated in a single coat of paraffin wax, the wax having a melting point of about 40 to about 50 degrees Celsius. The coating prolongs the time in which particles encapsulated therewith may remain active in aqueous environments. See Abstract. Additionally, the coating allows the bleach to be present in the same composition with other incompatible ingredients such as perfumes, colorants, builders, structurants, surfactants, etc. The core material of the wax encapsulated particles includes bleach, enzymes, peracid precursors, bleach catalysts, surfactants and perfumes. See column 4, lines 45-60. The solids content of the wax is from 100 to about 35% at 40 degrees Celsius and from about 0 to 15% at 50 degrees Celsius. See Abstract. The wax coating preferably has a thickness of from 200 to 600 microns. See column 3, lines 45-60. The shape of the core material is spherical or as close to this geometry as possible and has a diameter of from 100 to 2500 microns. See column 5, lines 1-5. For liquid formulations with a "gel" appearance and rheology, particularly if a clear gel is desired, a chlorine stable polymeric thickener is particularly useful. Suitable polymers are acrylic acid polymers that are cross-linked and are listed under the tradename Carbopol 940, etc. These thickeners are used in amounts from 0.5 to 3% by weight. See column 21, lines 15-35.

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It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to coat the enzyme as taught by Domburg with a coating agent such as paraffin wax, with a reasonable expectation of success, because Kamel et al teach that the coating provides stability to the enzyme in aqueous environments and prevents the interaction of the enzyme with other active ingredients in the composition, and further, such stability would be desirable in the cleaning compositions taught by Domburg et al.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a liquid detergent composition containing a coated bleaching agent, a coated enzyme in which the coating is sensitive to a change in temperature, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success, because the broad teachings of Domburg et al in combination with Kamel et al suggest a liquid detergent composition containing a coated bleaching agent, a coated enzyme in which the coating is sensitive to a change in temperature, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Response to Arguments

With respect to the rejection of the instant claims using Domburg et al in view of Kamel et al, Applicant states that Domburg et al do not teach a protein film bleach coating, but only teaches that a protein gel can be used. Additionally, Applicant states that Domburg et al is clearly directed to a solid granular composition while the present invention is directed to a liquid composition. Furthermore, Applicant states that

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Domburg et al fail to teach a coated enzyme and that the claimed limitation of "wherein the protein film coating bleaching agent is a substrate for the enzyme" is a physical limitation of the claimed invention and not merely a result or advantage stemming from the claimed combination. In response, note that, the Examiner asserts that the gelled polymer such as whey proteins, egg protein gels, etc., which are used as the coating material by Domburg et al would fall within the broad scope of "protein" as recited by the instant claims. Furthermore, the Examiner asserts that once the protein as taught by Domburg et al is coated onto the bleach, it would be in the form of film and fall within the broad scope of "film" as recited by the instant claims. Additionally, the Examiner asserts that Domburg et al clearly teaches that the composition may be in any suitable form include liquid form as recited by the instant claims (See column 7, lines 30-69 of Domburg et al).

With respect to a coated enzyme as recited by the instant claims, Kamel et al has been used as a secondary reference, as set forth above, and has been relied upon for its teaching of a coating agent for the enzyme. The Examiner asserts that Kamel et al is analogous prior art relative to Domburg et al and that one of ordinary skill in the art clearly would have looked to the teachings of Kamel et al to cure the deficiencies of Domburg et al. Kamel et al is a secondary reference relied upon for its teaching of a wax coating for the enzyme. The Examiner asserts that one of ordinary skill in the art clearly would have been motivated to coat the enzyme as taught by Domburg with a coating agent such as paraffin wax, with a reasonable expectation of success, because Kamel et al teach that the coating provides stability to the enzyme in aqueous

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environments and prevents the interaction of the enzyme with other active ingredients in the composition, and further, such stability would be desirable in the cleaning compositions taught by Domburg et al. Further, note that, the coating agent as taught by Kamel et al clearly is sensitive to a change in temperature as recited by the instant claim since Kamel et al teach that the wax coating has a melting point of about 40 degrees Celsius to 50 degrees Celsius (See Abstract of Kamel et al). Further, the Examiner maintains, as stated previously, that once the wax coating of the enzyme is dissolved or melted, the coated bleach as taught by Domburg et al would act as a substrate for the enzyme.

Note that, while Domburg et al or Kamel et al do not specifically mention that coating of the bleaching agent acts as a “substrate” for the enzyme as recited by the instant claims, the reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. Note that, while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). See MPEP 2144. Note that, the Examiner is merely stating that while Domburg et al or Kamel et al do not specifically state that the bleach acts as a substrate for the enzyme, the teachings of Domburg et al in combination with Kamel et al would suggest a composition in which the coated bleach acts as a substrate for the enzyme, once the coating from the enzyme has melted. Therefore, the Examiner

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asserts that the teachings of Domburg et al in combination with Kamel et al provide motivation for make the claimed invention. Thus, the Examiner asserts that the teachings of Domburg et al in view of Kamel et al are sufficient to render the claimed invention obvious under 35 USC 103.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory R. Del Cotto/
Primary Examiner, Art Unit 1796

/G. R. D./
January 26, 2011